

Subj 501

CLAIMS

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1. A method of labeling oligonucleotides, comprising:
 - a) providing: i) a solid support-bound oligonucleotide comprising an amino group, ii) a bifunctional linker arm and iii) an activated label;
 - b) reacting said solid support-bound oligonucleotide with said bifunctional linker arm to produce a support-bound, linker-oligonucleotide;
 - c) reacting said support-bound linker-oligonucleotide with said activated label to produce a labeled support-bound protected oligonucleotide.

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 2. The method of Claim 1 wherein said bifunctional linker arm is selected from a group consisting of the compounds listed in Tables 1, 2 and 3.

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 3. The method of Claim 1 wherein said activated label is selected from a group consisting of the compounds listed in Table 1, 2 and 3.

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 4. A method of labeling oligonucleotides, comprising:
 - a) providing: i) a solid support-bound oligonucleotide comprising an amino group, ii) a bifunctional linker arm and iii) an activated label;
 - b) reacting said solid support-bound oligonucleotide with said bifunctional linker arm to produce a support-bound, protected linker-oligonucleotide;
 - c) deprotecting the amino group of said support-bound, protected linker-oligonucleotide to produce a support-bound deprotected linker-oligonucleotide, and;
 - d) reacting said support-bound deprotected linker-oligonucleotide with said activated label to produce a labeled support-bound protected oligonucleotide.